

What is claimed is:

1. Gas-insulated switchgear comprising: a grounding metal housing filled with insulating gas, and in which a disconnecter part, a grounding switch part and a conductor connecting part are accommodated; and composite insulating shields integrally formed into one metal-dielectric member in which surface of a high electric field part located in the vicinity of ends of openings is coated with a dielectric in such a manner as to cover electrode parts of said disconnecter part, said grounding switch part and said conductor connecting part with the dielectric;

wherein, to form said composite insulating shields of at least one of the disconnecter part, the grounding switch part and the conductor connecting part, a metal shield of less than 0.6 in non-uniform constant before coating the shield with the dielectric is coated with a dielectric having a thickness of not more than approximately 30% of an inter-electrode distance from a facing electric-field relaxation shield or a charging part.

2. A gas-insulated switchgear comprising: a grounding metal housing filled with insulating gas, and in which a disconnecter part having a moving side electrode part and a stationary side electrode part is accommodated; and composite insulating shields integrally formed into one metal-dielectric member in which surface of a high electric field part located in the vicinity of ends of openings is coated with a dielectric in such a manner as to cover said moving side electrode part with the dielectric;

wherein, to form said composite insulating shield, a metal shield of less than 0.6 in non-uniform constant before coating with the dielectric is coated with a dielectric having a thickness of not more than approximately 30% of an inter-electrode distance from an electric-field relaxation shield of said stationary side electrode

part.

3. A gas-insulated switchgear comprising: a grounding metal housing 1 filled with insulating gas, and in which a grounding switch part having a moving side electrode part and a stationary side electrode part is accommodated; and composite insulating shields integrally formed into one metal-dielectric member in which surface of a high electric field part located in the vicinity of ends of openings is coated with a dielectric in such a manner as to cover said moving side electrode part with the dielectric;

10 wherein, to form said composite insulating shields, a metal shield of less than 0.6 in non-uniform constant before coating with the dielectric is coated with a dielectric having a thickness of not more than approximately 30% of an inter-electrode distance from an electric-field relaxation shield of said stationary side electrode part.

15 4. The gas-insulated switchgear according to claim 2, wherein, to form the electric-field relaxation shield of said stationary side electrode part, a metal shield of less than 0.6 in non-uniform constant before coating with the dielectric is coated with a dielectric having a thickness of not more than approximately 30% of an inter-electrode distance from an electric-field relaxation shield of said moving side electrode part.

20 5. The gas-insulated switchgear according to claim 3, wherein, to form the electric-field relaxation shield of said stationary side electrode part, a metal shield of less than 0.6 in non-uniform constant before coating with the dielectric is coated with a dielectric having a thickness of not more than approximately 30% of an inter-electrode distance from an electric-field relaxation shield of said moving side electrode part.

25 6. The gas-insulated switchgear according to claim 2, wherein

surface of the high electric field part in the vicinity of the end of the opening of the electric-field relaxation shield of said stationary side electrode part is composed of a metal or is coated with a dielectric of not larger than 1 mm in thickness.

5 7. The gas-insulated switchgear according to claim 3, wherein surface of the high electric field part in the vicinity of the end of the opening of the electric-field relaxation shield of said stationary side electrode part is composed of a metal or is coated with a dielectric of not larger than 1 mm in thickness.

10 8. The gas-insulated switchgear according to claims 1, wherein said dielectric coating is made of epoxy resin integrally formed with said electric-field relaxation shield by injection molding.

 9. The gas-insulated switchgear according to claims 1, wherein said insulating gas is a simple substance of SF₆, dry air, N₂, CO₂,
15 O₂ or C-C₄F₈, or a mixture of at least two of said gases.